

DETAILED ACTION

Claims 1-61, 72, 73, 84, 85, 88 and 89 have been cancelled. Claim 90 has been amended. New Claims 91 and 92 have been added.

Specification

1. An amendment to the specification was received on 11/14/11. This amendment is acceptable and has been entered.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claim 90 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 90 recites "such that during an impacted state at least one of the first and second end portions of the outer shell are positioned to engage and make contact with the upright column in response to an impact causing sufficient compression of the inner liner, such that the inner liner provides substantially all of an initial shock absorbing resistance during the impacted state and such that the outer shell, once engaged with

and contacting the upright column, augments the shock absorbing resistance provided by the inner liner." This claim language appears to constitute new matter as it does not have support within the original disclosure as filed.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. **Claims 90, 91, 62-64, 75, 80, 81, 83, 86 and 87 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 7,182,993 (Hamilton).**

Regarding **Claims 90, 62-64, 75, 80, 81, 83, 86 and 87**, **Hamilton** teaches:

Claims 90, 62, 63, 81, 86, – a protector device comprising: a substantially cylindrical outer shell (76) of a substantially "C" shaped cross section including first and second end portions having parallel edges defining an elongated opening, an inner liner (12) shaped to fit within said outer shell (76), wherein said outer shell (76) is "configured to/capable of" fitting around an upright column such that the outer shell (76) would retain to said column in a self-attaching manner without the need for any additional fixings, wherein said outer shell (76) is "configured to/capable of" fitting around an upright column such that the first and second end portions are held apart from each other and

from the upright column by the inner liner (12) and are spaced apart from the inner liner (12) and the upright column when retained in said self-attaching manner and when the column protector is in a non-impacted state, and in which the inner liner (12) comprises a solid substantially part cylindrical member having a substantially part cylindrical outer surface (along portions (40, 42 and 46)), and a substantially "U" shaped channel (along portions (50, 52 and 54)) formed on an opposite side of the liner to said substantially part cylindrical outer surface (along portions (40, 42 and 46)) and in which, in use, said channel (along portions (50, 52 and 54)) could provide a flush interface between an inner profile of said inner liner (12) and an external profile of an upright column, and the inner liner (12) being compressible such that during an impacted state at least one of the first and second end portions of the outer shell (76) are "positioned to/capable of" making contact with a portion of an upright column, (Figure 3); **Claim 64** - wherein said outer shell (76) comprises an elongate member having a substantially "C" shaped cross section, (Figure 3); **Claim 75** – wherein said inner liner (12) comprises polyethylene (see Column 2, Lines 27-33); **Claim 80** – wherein said inner liner (12) is "configured such that, after receiving an impact, the inner liner (12) promotes repositioning of the whole device to a position similar to a position of the device before the impact occurred, (Figure 3); **Claim 83** – in which said inner liner (12) is bonded to an inner surface of the outer shell (76), such that the inner liner (12) is fixed relative to the outer shell (76) via hook and loop material and cannot slide relative to the outer shell (76), (Figure 3 and Column 3, Lines 18-33); **Claim 87** – "configured to/capable of" attaching to an upright

column, without the need for an integrated or independent fastening or securing mechanism or mechanisms, and without the need for a bonding agent, (Figure 3).

Regarding **Claim 91**, **Hamilton** teaches: **Claim 91** – a column protector device being “arranged to/capable of” clipping onto an upright column, the column protector device comprising: a substantially cylindrical outer shell (76) including a substantially “C” shaped cross section having first and second ends defining a slotted opening, a resiliently compressible inner liner (12) shaped to fit within said outer shell (76) between said outer shell (76) and an upright column and including a “U” shaped channel (along portions (50, 52 and 54)) “configured to/capable of” receiving a rectangular front portion of an upright column, and wherein said resiliently compressible inner liner (12) is “configured to/capable of” contacting a rectangular front portion of an upright column and said outer shell (76) in the non-impacted state such that said inner liner (12) maintains said first and second ends of said outer shell (76) spaced apart from said first and second lip members in the non-impacted state, (Figure 3).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

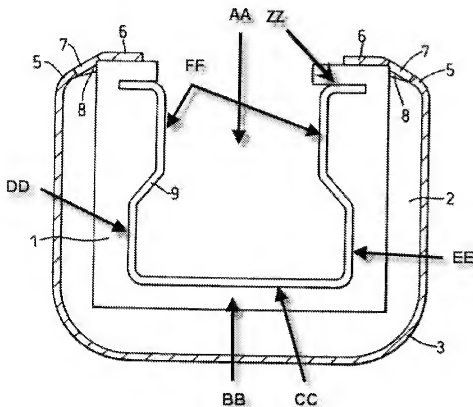
8. **Claims 90, 91, 62-69, 71, 74-83, 86 and 87 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.K. Patent Application GB 2,321,688 A (Ian) in view of U.S. Patent No. 6,684,572 (Homolka et al.) and U.S. Patent No. 1,620,933 (Wilcox).**

Regarding **Claims 90, 62-64, 80-83, 86 and 87**, Ian teaches: **Claim 90** - a column protector device (1-3) for protection of an upright column (9 – *wherein it should be understood that the “upright column” is only recited in claim 90 and its dependent claims in terms of the intended use of the “column protector”, and thus the prior art “column protector” of Ian only needs to be capable of performing the intended use, and thus Ian is not required to teach all of the specifics of the “upright column”; Therefore, the “upright column” in this rejection is only detailed in order to detail the functionality of the “column protector” of Ian in regards to the intended use language of the claims*) of a racking system, (Figure 3); wherein the column (9) has a channel shaped cross section (AA) having a substantially rectangular front portion (BB) consisting of a front member (CC), and first and second side members (DD/FF and EE/FF), (Annotated Figure 2 Below); the column protector device (1-3) being “arranged to/capable of” clipping onto

the upright column (9), (Figure 2 and Page 4, Lines 10-14); the protector device further comprises a rigid part cylindrical "C" shaped cross section outer shell (3) including first and second end portions (along (6)) having parallel edges defining an elongated slotted opening, and an inner liner (1 and 2) shaped to fit within the outer shell (3), (Figure 2 and Page 3, Lines 3-8 of the specification); wherein the outer shell (3) is "configured to/capable of" fitting around the upright column (9) so that the outer shell (3) retains to the column (9) without further fixtures, (Figure 2 and Page 4, Lines 10-14); wherein said outer shell (3) is "configured to/capable of" fitting around said upright column (9) such that the first and second end portions (6) are held apart from each other and from the upright column (9) by the inner liner (1 and 2) and are spaced apart from the inner liner (1 and 2) and the upright column (9) when retained in said self attaching manner and when the column protector (1-3) is in a non-impacted state, (Figure 2); the outer shell (3) also surrounds the front member (CC) and partially surrounds the first and second side members (DD/FF and EE/FF), thereby protecting the front member (CC) and parts of the side members (DD/FF and EE/FF), (Annotated Figure 2 Below); the inner liner (1 and 2) being retained between the outer shell (3) and the column (9) in use, (Figure 3); the inner liner (1 and 2) comprises a solid substantially part cylindrical member having a substantially part cylindrical outer surface (the outer corners of (2) are rounded and the inner liner is therefore part cylindrical), the inner liner (1 and 2) also having a substantially "U" shaped channel (the inner surface of portion (1) of the liner (1 and 2) touching the upright column (9)) formed on an opposite side of said inner liner to said substantially part cylindrical outer surface and in which, in use, said channel provides

for a flush interface between the inner liner (1 and 2) and the upright column (9), (as seen in Figure 2); the inner liner (1 and 2) being compressible (See Page 3, Lines 3-8 - wherein it should be understood that the outer shell (3) would be functionally "capable of" augmenting the shock absorbing power of the inner liner (1 and 2) if the outer shell (3) was placed over a different size or shaped column (9) such as a column (9) having portions (ZZ) having extensions which wrap around the end portions (6) of the outer shell (3)); **Claim 62** – wherein the upright column (9) further includes first and second inner side members (FF), and the outer shell (3) being capable of partially surrounding the first and second inner side members (FF – wherein it should be understood that the outer shell (3) would be functionally "capable of" only partially surrounding the inner side members (FF) if the outer shell (3) was placed over a different size or shaped column (9) such as a column (9) having portions (ZZ) having extensions which wrap around the end portions (6) of the outer shell (3)) so that the exposed upright edges (the end edges near item (6) in Annotated Figure 2) of the outer shell (3) lay adjacent to the sides of the column (9) at a position where the column (9) is relatively narrower, (Annotated Figure 2 Below); **Claim 63** – wherein, in use, the column (9) resides partially within a channel formed by the outer shell (3), (Figure 2); **Claim 64** – wherein said outer shell (3) comprises an elongate member having a substantially "C" shaped cross section, (Figure 2); **Claim 80** – wherein said inner liner (1 and 2) is "capable of/configured such that", after receiving an impact, the inner liner (1 and 2) promotes the repositioning of the whole device to an original shape before the impact occurred, (Figure 2 and Page 4, Lines 3-8); **Claim 81** - the outer shell (3) surrounding the front member (CC) and being

capable of partially surrounding the first and second inner side members (FF – wherein it should be understood that the outer shell (3) would be functionally “capable of” only partially surrounding the inner side members (FF) if the outer shell (3) was placed over a different sized or shaped column (9) such as a column (9) having portions (ZZ) which wrap around the end portions (6) of the outer shell (3), and also surrounding the inner liner (1 and 2), which rests between a substantially part cylindrical inner surface of the outer shell (3) and an outer face of the front member (CC), an outer face of the first outer side member (DD) and second outer side member (EE), (Annotated Figure 2 Below); **Claim 82** - the inner liner and outer shell being slideable with respect to each other along a central axis of the outer shell, (Page 1, Lines 24-28); **Claim 83** - the outer liner and an inner liner being bonded together, (Page 2, Lines 1-5); **Claim 86** - the outer shell and the inner liner composed of polycarbonate and foam (Page 2, Line 8 and Page 2, Lines 6-7); both materials having greater ductility, and impact resilience than the shelving which is made from metal (Page 1, Lines 12-14); **Claim 87** - teaches the device being “capable of” fitting around the upright column so that the outer shell (3) retains to the column (9) without further fixtures, (Figure 2 and Page 4, Lines 10-15).



Annotated Figure 2

lan does not teach:

(A) Wherein the outer shell is substantially cylindrical with a substantially "C" shaped cross section (**Claim 90**).

(B) Such that the first and second end portions are spaced apart from the inner liner (**Claim 90**).

In regards to (A), **Homolka et al.** teaches: **Claim 90** – an outer shell (8) which is substantially cylindrical with a substantially "C" shaped cross section, (Figures 1-5).

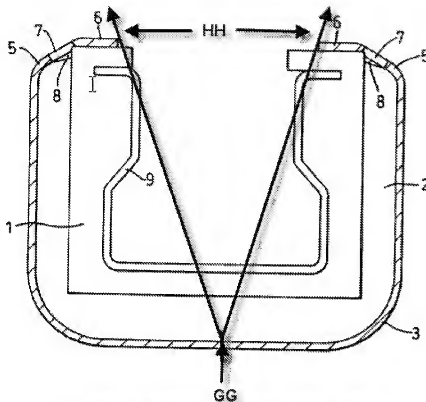
Therefore, it would have been obvious to one of ordinary skill in the art to modify the outer shell of the column protector of **lan** to have wherein the outer shell is substantially cylindrical with a substantially "C" shaped cross section (**Claim 90**) as taught by

Homolka et al. for the purposes of having a shape which has no sharp corners which allows for a safer device which also is more efficient at deflecting impact forces. Additionally, it should be understood that it is extremely well known in the art to make bumpers and Column guards cylindrical in cross section as is evidenced by: U.S. Patents No. 1,620,933 (Wilcox), No. 3,372,552 (Liddel), No. 4,113,110 (Mittag), No. 5,482,238 (Kreiter), No. 6,102,611 (Roller) and No. 6,242,070 (Gillispie et al.).

In regards to (B), **Wilcox** teaches: **Claim 90** – an outer liner (1) and an inner liner (2/3), wherein first and second end portions of the outer liner (1) are spaced apart from the inner liner (2/3), (Figures 1-3). Therefore, it would have been obvious to one of ordinary skill in the art to modify the outer shell of the column protector of **lan** to have the first and second end portions spaced apart from the inner liner (**Claim 90** - as the outer liner (6) of **lan** could certainly extend further than portion (1) of the inner liner (1/2)) as taught by **Wilcox** for the purposes of having a larger and more secure outer liner which would provide more protection of the inner liner and/or the upright column. Additionally, it should be understood that several prior art devices show outer liners extending further than inner liners such as: U.S. Patent Application No. 2001/0049909 (Homolka et al.) – See Figure 4, and U.S. Patent No. 4,703,531 (Bissett) – See Figure 2.

Regarding **Claim 65, lan as modified by Homolka et al. and Wilcox** teaches the column protector as described above (See Rejection of Claim 61 Above), in addition to **lan** teaching the outer shell (3) comprising a tubular substantially cylindrical member (3), (Figure 3); wherein the tube has a pair of substantially parallel opposing edges (the

end edges near item (6) in Annotated Figure 2, Version #2 Below) on either side of a gap, (Figure 2). **Ian as modified by Homolka et al. and Wilcox** does not teach the cylindrical member extending over an angle in the range of 260 to 280 degrees, but **Ian** does teach a range (HH) about a longitudinal centre line (GG) of the outer shell (3) which is very similar to the claimed range, (Annotated Figure 2, Version #2 Below). Therefore, the examiner points to case law *In Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), *cert. denied*, 469 U.S. 830, 225 USPQ 232 (1984). The court found that if the only difference between the prior art device and the claims was a recitation of relative dimensions and a device having those claimed dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device (See MPEP 2144). It would have been obvious to one of ordinary skill in the art to modify the prior art device of **Ian as modified by Homolka et al. and Wilcox** to have the cylindrical member extending over an angle in the range of 260 to 280 degrees for the purpose of user design as it would not cause the device to perform differently.



Annotated Figure 2, Version #2 (lan)

Regarding **Claims 66-68, lan as modified by Homolka et al. and Wilcox** teaches the limitations discussed above, in addition to teaching various dimensional aspects of the claimed invention. **lan as modified by Homolka et al. and Wilcox** does not teach the exact dimensional aspects as recited in claims 66-68. However, the examiner points to case law *In Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), *cert. denied*, 469 U.S. 830, 225 USPQ 232 (1984). The court found that if the only difference between the prior art device and the claims was a recitation of relative dimensions and a device having those claimed dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device (See MPEP 2144). Therefore, it would have been

obvious to one of ordinary skill in the art at the time of the invention to provide the column protector of **lan as modified by Homolka et al. and Wilcox** with a height between 30-120cm, or an external diameter of 10-14cm or an outer wall thickness between 7-9mm since the column protector of **lan as modified by Homolka et al. and Wilcox** would not perform differently then it would before with its previous dimensions.

Regarding to **Claim 69, lan as modified by Homolka et al. and Wilcox** teaches the limitations as discussed above, in addition to **lan** teaching a pair of opposing edges (6) spaced apart from one another at a given distance, (Figure 2). **lan as modified by Homolka et al. and Wilcox** does not teach that given distance being between 5cm and 11cm. However, the examiner points to case law *In Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), *cert. denied*, 469 U.S. 830, 225 USPQ 232 (1984). The court found that if the only difference between the prior art device and the claims was a recitation of relative dimensions and a device having those claimed dimensions would not perform differently then the prior art device, the claimed device was not patentably distinct from the prior art device (See MPEP 2144). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the distance between the opposing edges of **lan as modified by Homolka et al. and Wilcox** to be between 5cm and 11cm as this would not affect the functioning of the device of **lan as modified by Homolka et al. and Wilcox**

Regarding **Claim 71, lan as modified by Homolka et al. and Wilcox** teaches the column protector as described above (See Rejection of Claim 61 Above), in addition to **lan** teaching the outer shell being made from polycarbonate, (Page 2, Line 8). It

should also be understood that the following materials are all well known in the art as substitutions for polycarbonate: resilient elastomeric polymer based materials; polyethylene; high density polyethylene; polypropylene; polyvinylchloride; polystyrene; plastic; or a mixture of plastics.

Regarding **Claim 74, *lan as modified by Homolka et al. and Wilcox*** teaches the limitations as discussed above, in addition to **lan** teaching the outer surface of the substantially U shaped channel of the inner liner (the inner surface of (1)) being separated a given distance from outer part cylindrical surface (outer surface of liner (2)), (Figure 2). ***lan as modified by Homolka et al. and Wilcox*** does not teach the given dimensions being in the range of 2 to 5cm. However, the examiner points to case law *In Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), *cert. denied*, 469 U.S. 830, 225 USPQ 232 (1984). The court found that if the only difference between the prior art device and the claims was a recitation of relative dimensions and a device having those claimed dimensions would not perform differently then the prior art device, the claimed device was not patentably distinct from the prior art device (See MPEP 2144). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the column protector of ***lan as modified by Homolka et al. and Wilcox*** with a distance between the outer part cylindrical surface and the outer surface of the U-shaped channel between 2-5cm since the column protector of ***lan as modified by Homolka et al. and Wilcox*** would operate equally the same with any desired dimensions.

Regarding **Claim 75, *lan as modified by Homolka et al. and Wilcox*** teaches the limitations as discussed above, in addition to **lan** teaching the inner liner being made from a compressive composite material, (Figure 2 and Page 2, Lines 1-7). Wherein, it should be understood that the Examiner takes OFFICIAL NOTICE that the following materials are all well known in the art as substitutions for a compressive composite material: polyethylene; polypropylene; polycarbonate; polyvinylchloride; polystyrene; natural rubber foam; synthetic rubber foam; closed cell SBR foam material.

Regarding **Claims 76 and 77, *lan as modified by Homolka et al. and Wilcox*** teaches the limitations discussed above, in addition to **lan** teaching various dimensional aspects of the claimed invention. **lan as modified by Homolka et al. and Wilcox** does not teach the exact dimensional aspects as recited in claims 76 and 77. However, the examiner points to case law *In Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), *cert. denied*, 469 U.S. 830, 225 USPQ 232 (1984). The court found that if the only difference between the prior art device and the claims was a recitation of relative dimensions and a device having those claimed dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device (See MPEP 2144). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the inner liner of **lan as modified by Homolka et al. and Wilcox** with a height between 30-120cm, or an external diameter of 10-14cm since the column protector of **lan as modified by Homolka et al. and Wilcox** would operate the same with any desired dimensions.

Regarding **Claims 78 and 79, lan as modified by Homolka et al. and Wilcox** teaches the limitations as discussed above, in addition to **lan** teaching the inner liner (1 and 2) being U-shaped and having a given width and depth dimension, (Figures 1(a) and 1(b)). **lan as modified by Homolka et al. and Wilcox** does not teach the exact dimensional aspects of the width and depth dimensions as recited in claims 78 and 79. However, the examiner points to case law *In Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), *cert. denied*, 469 U.S. 830, 225 USPQ 232 (1984). The court found that if the only difference between the prior art device and the claims was a recitation of relative dimensions and a device having those claimed dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device (See MPEP 2144). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide "U" shaped channel of the inner liner of **lan as modified by Homolka et al. and Wilcox** with width in the range of 7 to 12 cm, or a depth in the range of 2 to 4cm since the column protector of **lan as modified by Homolka et al. and Wilcox** would operate the same with any desired dimensions.

Regarding **Claim 91**, **lan** teaches: **Claim 91** - a column protector device (1-3) for protection of an upright column (9 – *wherein it should be understood that the "upright column" is only recited in claim 91 in terms of the intended use of the "column protector"; and thus the prior art "column protector" of lan only needs to be capable of performing the intended use, and thus lan is not required to teach all of the specifics of the "upright column"; Therefore, the "upright column" in this rejection is only detailed in*

order to detail the functionality of the "column protector" of Ian in regards to the intended use language of the claim of a racking system, (Figure 3); wherein the column (9) has a channel shaped cross section (AA) having a substantially rectangular front portion (BB) consisting of a front member (CC), and first and second side members (DD/FF and EE/FF), (Annotated Figure 2 Above); the column protector device (1-3) being arranged to/capable of clipping onto the upright column (9), (Figure 2 and Page 4, Lines 10-14); the protector device further comprises a rigid part cylindrical "C" shaped cross section outer shell (3) including first and second ends (along (6)) defining a slotted opening, (Figure 2 and Page 3, Lines 3-8 of the specification); a resiliently compressible inner liner (1/2) shaped to fit within said outer shell (3) between said outer shell (3) and the upright column (9) and including a "U" shaped channel (the inner portion of portion (1) of the inner liner (1/2)) "configured to/capable of" receiving said rectangular front portion (BB) of said upright column (9), said resiliently compressible liner (1/2) being "configured to/capable of" contacting said rectangular front portion (BB) and said outer shell (3) in the non-impacted state such that said inner liner (1/2) maintains said first and second ends (along (6)) of said outer shell (3) spaced apart from first and second lip members (of column (9)) in the non-impacted state, (Figure 2 and Annotated Figure 2 Above).

Ian does not teach:

(C) Wherein the outer shell is substantially cylindrical with a substantially "C" shaped cross section (**Claim 91**).

(D) Such that the first and second end portions are spaced apart from the inner liner in the non-impacted state (**Claim 91**).

In regards to (C), **Homolka et al.** teaches: **Claim 91** – an outer shell (8) which is substantially cylindrical with a substantially “C” shaped cross section, (Figures 1-5). Therefore, it would have been obvious to one of ordinary skill in the art to modify the outer shell of the column protector of **Ian** to have wherein the outer shell is substantially cylindrical with a substantially “C” shaped cross section (**Claim 91**) as taught by **Homolka et al.** for the purposes of having a shape which has no sharp corners which allows for a safer device which also is more efficient at deflecting impact forces. Additionally, it should be understood that it is extremely well known in the art to make bumpers and Column guards cylindrical in cross section as is evidenced by: U.S. Patents No. 1,620,933 (Wilcox), No. 3,372,552 (Liddel), No. 4,113,110 (Mittag), No. 5,482,238 (Kreiter), No. 6,102,611 (Roller) and No. 6,242,070 (Gillispie et al.).

In regards to (D), **Wilcox** teaches: **Claim 91** – an outer liner (1) and an inner liner (2/3), wherein first and second end portions of the outer liner (1) are spaced apart from the inner liner (2/3) in the non-impacted state, (Figures 1-3). Therefore, it would have been obvious to one of ordinary skill in the art to modify the outer shell of the column protector of **Ian** to have the first and second end portions spaced apart from the inner liner in the non-impacted state (**Claim 91** - as the outer liner (6) of **Ian** could certainly extend further than portion (1) of the inner liner (1/2)) as taught by **Wilcox** for the purposes of having a larger and more secure outer liner which would provide more protection of the inner liner and/or the upright column. Additionally, it should be

understood that several prior art devices show outer liners extending further than inner liners such as: U.S. Patent Application No. 2001/0049909 (Homolka et al.) – See Figure 4, and U.S. Patent No. 4,703,531 (Bissett) – See Figure 2.

9. Claims 66-69, 74 and 76-79 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 7,182,993 (Hamilton).

Regarding **Claims 66-68**, **Hamilton** teaches the limitations discussed above, in addition to teaching various dimensional aspects of the claimed invention. **Hamilton** does not teach the exact dimensional aspects as recited in claims 66-68. However, the examiner points to case law *In Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), *cert. denied*, 469 U.S. 830, 225 USPQ 232 (1984). The court found that if the only difference between the prior art device and the claims was a recitation of relative dimensions and a device having those claimed dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device (See MPEP 2144). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the protector of **Hamilton** with a height between 30-120cm, or an external diameter of 10-14cm or an outer wall thickness between 7-9mm since the protector of **Hamilton** would not perform differently than it would before with its previous dimensions.

Regarding to **Claim 69**, **Hamilton** teaches the limitations as discussed above, in addition to **Hamilton** teaching: **Claim 69** - a pair of opposing edges spaced apart from one another at a given distance, (Figure 2). **Hamilton** does not teach that given distance being between 5cm and 11cm. However, the examiner points to case law *In*

Gardner v. TEC Systems, Inc., 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), *cert. denied*, 469 U.S. 830, 225 USPQ 232 (1984). The court found that if the only difference between the prior art device and the claims was a recitation of relative dimensions and a device having those claimed dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device (See MPEP 2144). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the distance between the opposing edges of **Hamilton** to be between 5cm and 11cm as this would not affect the functioning of the device of **Hamilton**.

Regarding **Claim 74**, **Hamilton** teaches the limitations as discussed above, in addition to **Hamilton** teaching the outer surface of the substantially U shaped channel (along portions (50, 52 and 54)) of the inner liner (12) being separated a given distance from the outer part cylindrical surface (along portions (40, 42 and 46)), (Figure 3). **Hamilton** does not teach the given dimensions being in the range of 2 to 5cm. However, the examiner points to case law *In Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), *cert. denied*, 469 U.S. 830, 225 USPQ 232 (1984). The court found that if the only difference between the prior art device and the claims was a recitation of relative dimensions and a device having those claimed dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device (See MPEP 2144). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the protector of **Hamilton** with a distance between the outer part cylindrical

surface and the outer surface of the U-shaped channel between 2-5cm since the protector of **Hamilton** would operate equally the same with any desired dimensions.

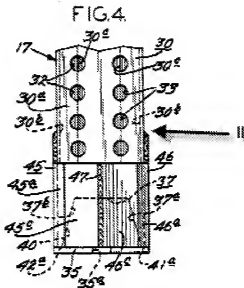
Regarding **Claims 76 and 77**, **Hamilton** teaches the limitations discussed above, in addition to **Hamilton** teaching various dimensional aspects of the claimed invention. **Hamilton** does not teach the exact dimensional aspects as recited in claims 76 and 77. However, the examiner points to case law *In Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), *cert. denied*, 469 U.S. 830, 225 USPQ 232 (1984). The court found that if the only difference between the prior art device and the claims was a recitation of relative dimensions and a device having those claimed dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device (See MPEP 2144). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the inner liner of **Hamilton** with a height between 30-120cm, or an external diameter of 10-14cm since the protector of **Hamilton** would operate the same with any desired dimensions.

Regarding **Claims 78 and 79**, **Hamilton** teaches the limitations as discussed above, in addition to **Hamilton** teaching the inner liner (12) being U-shaped (along portions (50, 52 and 54)) and having a given width and depth dimension, (Figure 3). **Hamilton** does not teach the exact dimensional aspects of the width and depth dimensions as recited in claims 78 and 79. However, the examiner points to case law *In Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), *cert. denied*, 469 U.S. 830, 225 USPQ 232 (1984). The court found that if the only difference

between the prior art device and the claims was a recitation of relative dimensions and a device having those claimed dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device (See MPEP 2144). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide "U" shaped channel of the inner liner of **Hamilton** with width in the range of 7 to 12 cm, or a depth in the range of 2 to 4cm since the protector of **Hamilton** would operate the same with any desired dimensions.

10. Claim 70 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.K. Patent Application GB 2,321,688 A (Ian) in view of U.S. Patent No. 6,684,572 (Homolka et al.) and U.S. Patent No. 1,620,933 (Wilcox), and further in view of U.S. Patent No. 4,088,229 (Jacoby et al.).

Regarding **Claim 70, Ian as modified by Homolka et al. and Wilcox** teaches the limitations discussed above, but does not teach the outer shell having a chamfered edge. However, **Jacoby et al.** teaches a shell of a protector having a chamfered edge (II) between its outer and inner surface, (Annotated Figure 4 Below). Therefore, it would have been obvious to one of ordinary skill in the art to modify **Ian as modified by Homolka et al. and Wilcox** to have the outer shell with chamfered edges as taught by **Jacoby et al.** for the purpose of user efficiency and improved protection of the upright column.



Annotated Figure 4.

Allowable Subject Matter

11. Claim 92 is allowed.

Response to Arguments

12. Applicant's arguments filed 11/14/11 with regards to the 112, 1st paragraph rejection as presented in the previous Non-Final Rejection have been fully considered but are not persuasive.
13. The applicant argues:

"Applicant submits that while the written description does not explicitly described these elements, one of ordinary skill in the art would recognize from the written description and drawings as a whole that the claimed elements are fully

supported and enabled by the specification and that the Applicant had possession of the claimed elements (See Page 15 of Applicant's Arguments)"

AND

"Furthermore, one of ordinary skill in the art would recognize from Figure 6 (annotated below) that as the inner liner (301) is compressed, the outer shell (300) will move with the inner liner (301) toward the column, until the end portions of the outer shell make contact with the lips (605, 609) of the column. One of ordinary skill in the art would recognize that once the outer shell contacts the column, additional energy from the impact would be absorbed by compression of the outer shell, as the column would prevent further movement of the end portions. In this manner, compression of the outer shell augments the shock absorbing resistance of the inner liner when the outer shell engages and contacts the column, as claimed. (See Page 16 of the Applicant's Arguments)."

However, the Examiner disagrees. One of ordinary skill in the art cannot definitively conclude from the original disclosure as filed that the end portions of the outer shell (300) would in fact make contact with the lip members (605, 609) during an impacted state. First, while the outer shell (300) and the inner liner (301) are both compressible, the specification does not clearly detail how much they actually compress (i.e. a distance) and furthermore, does not define a respective distance between the end portions of the outer shell (300) and the lip members (605, 609). Secondly, one of ordinary skill in the art could just as easily conclude that the shape of the outer shell (300) would likely cause the end portions of the outer shell (300) to bend outward when

a force or impact is applied to the outer shell (300). Therefore, as one of ordinary skill in the art cannot definitively state that the outer shell (300) would in fact make contact with the lip members (605, 609) during an impacted state, the 112, 1st paragraph rejection remains.

14. Applicant's arguments with respect to claims 90, 91, 62-71, 74-83, 86 and 87 have been considered but are moot in view of the new ground(s) of rejection as described above.

Conclusion

15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Josh Rodden whose telephone number is (571) 270-5222. The examiner can normally be reached on M-Th 7am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darnell Jayne can be reached on (571) 272-7723. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Joshua Rodden/
Art Unit: 3637

/Darnell M Jayne/
Supervisory Patent Examiner, Art Unit 3637